Before the
Federal Communications Commission
Washington, D.C. 20554

In the matter of	)	
	)	
Amendment of Part 97 of the Commission's	)	RM-11306
Rules Governing the Amateur Radio Service	)	

Comment

This comment is being filed in regard to a Partition for Rule Making as filed by the American Radio Relay League (ARRL), proceeding RM-11306.

I am **opposed** to this partition to regulate by bandwidth. After reviewing the proposal, I find that it is not a model that other countries have used to regulate by bandwidth.

Rather then use a model that would, for example, set a limit of 6Khz for HF, the ARRL has proposed a plan that is even more complex then the current regulations.

Setting different bandwidth limits within a band, is in reality still a mode based system, and not a true bandwidth system. For example, it is clear the SSB operation would not be allowed on the lower portions of the bands, just as today. The bandwidth restrictions are still specific to certain modes, and as such do not really constitute a well thought out system that would streamline operations.

If fact this proposal will create many problems that don't exist today. Problems not only to operation on the bands, but also problems in regards to FCC enforcement. I would like to point out some major issues that are problematic with the approach taken in RM-11306.

1. **Bandwidth Measurement**

Currently, the "good operating practice" rule is used to regulate signals on the air. I'm sure that this was put in place due to the fact that the Amateur Radio Service is one on the few services that allow licensees to actually build transmitting equipment, and modify commercial transmitting equipment. Indeed this is one of the values of the ARS, in that it allows licensees to learn RF technology, by experimentation.

Indeed, there have been poor signals transmitted in the past, and that continues today to some extent. The traditional method to address this has always been by pointing out poor signals to the operators generating those signals. At times, some offending stations have been cited by the Commission for not following the "good operating practice" rule for gross negligence, as in the example of driving an amplifier without the needed ALC signal from the exciter. Wide signals are apparent without expensive test equipment, and have been dealt with in the past.

One problem I see with this proposal are the narrow bandwidth limits specified. Abandoning the "good operating practice" rule, and defining these limits, will stop the experimental aspect of the ARS. Unless an operator has thousands of dollars in RF test equipment, he will have no way to verify that his transmitter project operates within the proposed narrow bandwidths. The ARS will become a service of radio operators using only commercial equipment, and no longer grow in their knowledge of RF electronics.

I see no reason to limit the ARS in this way. A signal that is 2/10th of a Khz wide from a home built transmitter, in development, should not be a violation of the regulations. Most amateurs don't have professional equipment.

2. Semi-Automatic Operations

This part of the proposal is a huge problem. As everyone that has operated on the HF bands know, there are many times that you can only hear one station on a frequency, while other stations are in communication on that frequency.

To allow Semi-Automatic Robot operations anywhere on the bands, would be a disaster! There is no way that a Robot station can tell that a frequency is clear, without monitoring that frequency for many minutes. Of coarse, that is not how the Robots work. Unregulated Robot operation as allowed from this proposal would create extreme havoc to communications on the bands. Semi-Automatic operations if allowed by the Commission, must be confined to certain frequency segments.

3. The Band Plan

While I am against this complex proposal, I am open to a less complex system, as is used by Canada. However, before any bandwidth proposal can be approved, there needs to be a valid and workable bandplan. This has NOT been done. The ARRL have put the "cart" up for sale to the FCC, but they have no "horse" to sell. There is no band plan in the works that I know of, and the havoc created by this proposal without one, would be assured.

Any proposal that asks the Commission to get out of the regulation business, MUST have a bandplan that guides operators on what is acceptable. There is nothing that goes with this plan. The resulting chaos would be so harmful to the ARS, that it would lead to a situation similar to downfall of the 11 meter Citizens Band. Operations, completely out of control, with no band plan or regulations to control them.

4. Enforcement

With this plan, and the narrow technical limits set for bandwidth, I can envision an enforcement nightmare for the Commission. Observers with out proper training or test equipment would be likely to think that a SSB station was wide, just because of the bass response of the microphone. Signals would be analyzed by running audio into "freeware" PC software programs, and the letters to the Commission alleging violations would skyrocket.

5. The Future as seen by the ARRL

The opening of the ARRL proposal speaks of unknown technologies changing HF rapidly in the near future. I have to take issue with this as an argument to sell this proposal. I was a Ham before the personal computer, and have been active with computers since the first PC hit the market. I also have been involved professionally with digital voice and sound technology since the 1970's. I my view, the limited bandwidth of the ARS HF bands, will not allow much progress in digital voice technology.

Beyond the bandwidth problems, digital technology limits the practicality of multiple station operations on an emergency net due to the nature of the technology. Unlike SSB where multiple stations can work a net easily, the link time involved with digital is problematic. Like it or not, CW and SSB will remain the most efficient modes available for long range communications, These modes must be preserved for emergency use, and they most be protected from Semi-Automatic Robot operations.

I agree with the ARRL that experimentation with digital modes is good, but in that it is likely that only limited progress will be made, it is not in the best interest of the ARS to allow these experimental modes full access across the HF bands. Limited access is the best method. In truth, it would seem that the current regulations would allow for that experimentation at present.

To turn the regulations inside out with this proposal, by using the argument that some unknown technology may suddenly appear, goes against the "Good Regulating Practice" rule. The known bandwidth limitations of HF, combined

with the signal fading and noise present on the HF bands, makes this a very weak argument, that ignores engineering reality.

Technology and engineering is the base of the ARS. Indeed it is the base of all services that are regulated by the Commission.

Predictions without any scientific data to back them up, have no place in the regulating process. Communication services are bound by the laws of physics.

6 . Closing

In closing, the discussion on this proposal has been ongoing for over two years. As I mentioned, I am an ARRL member, and have come to the conclusion that this proposal is not gaining approval with the rank and file ARRL member, or the rank and file amateur.

In reality, the proposal was put together by an Ad Hoc Digital committee, and there is an obvious bias toward digital operations.

While digital technology has many benefits, when bandwidth is available, it is not cost effective in many public services, such as Aviation, Marine, Family Radio, or Amateur Radio. One of the best parts of Amateur radio, is that a young person can work stations around the world with an old inexpensive transceiver, with very little money needed for equipment.

To take an approach that operations require expensive computers, interface units, and software, makes Amateur Radio an Elite Service available to only those that have the money to join. Digital is fine, but to set aside entire HF bands for Email, is not in the best interest of Amateur Radio.

There are way too many flaws, and I suggest that this proposal NOT be taken any farther.

Changes may be needed, but the process must be (1) create a band plan, and (2) propose a less complex way to change to a bandwidth system.

The ARRL needs to involve more rank and file members, and the rest of the Ham community, and go back to the drawing board.

Thank you for considering my comments,

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